**Homework 78** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Quiz 20 Review** Period:\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Failure to show all work will result in a LaSalle.**

|  |  |
| --- | --- |
| 1) The box for a 15 inch pizza (a pizza 15 inches in diameter) from Domino’s is square-shaped and leaves room for one inch on each side of the pizza.   1. How many square inches is the area of the base of the pizza box? 2. EPIC advertising company sells advertising space of the pizza boxes from Domino’s. If the box for the 14 inch pizza is a square and leaves room for one inch on each side of the pizza, approximately how much advertising can be seen BEFORE the pizza is eaten? | 2) In the figure below, ABCD is a square. Points on each pair of adjacent sides of ABCD are connected to form 4 congruent right triangles with one leg two times as long as the other, as shown below.  A  D  2x  B  C  x   1. What fraction of the area of square ABCD is UN-shaded? 2. What fraction of the area of square ABCD is shaded? |
| 3) A square and a semicircular region have the same perimeter. If the length of the radius of the semicircular region is 4, what is the length of one side of the square?  Exact answer: Approximate answer: | 4) A square and a semicircular region have the same perimeter. If the perimeter of the square is 10 in, what is the length of the radius of the circle?  Exact answer: Approximate answer: |
| 5) A plot of land is 6-acres-by-4-acres. With new ownership, this plot of land is set to increase by 4 times. If the 6-acre side of the plot increased by 2 acres, by how much did the 4-acre side increase? | 6) The circumference of a circle and the perimeter of an equilateral triangle are the same. If the diameter of the circle is 10 cm, what is the length of the side of the triangle? Round to the nearest tenth. |